

**CLAIMS:**

What is claimed is:

1. A method comprising:
  - selecting a frequency hopping code (FHC) for communicating with other devices in a multi-band ultra-wideband (MB-UWB) network, wherein the FHC defines a sequence of two or more pulses over two or more frequencies.
2. The method of claim 1, wherein the FHC defines a sequence of two or more pulses over two or more frequencies comprises:
  - the FHC defines a sequence of two or more pulses over two or more frequencies from a set of three or more frequencies.
3. The method of claim 1, wherein selecting a frequency hopping code (FHC) comprises:
  - selecting a frequency hopping code (FHC) from a set of predetermined FHC's.
4. The method of claim 3, wherein selecting a frequency hopping code (FHC) from a set of predetermined FHC's for communicating with other devices in a multi-band ultra-wideband (MB-UWB) network comprises:
  - selecting a frequency hopping code (FHC) from a set of predetermined FHC's for communicating with other devices in an Institute of Electrical and Electronics Engineers (IEEE) 802.15.3 network.
5. The method of claim 3, further comprising:

2 encoding a communication to transmit using the selected FHC.

1 6. The method of claim 3, further comprising:

2 decoding a communication received using the selected FHC.

1 7. An electronic appliance, comprising:

2 one or more dipole antenna(e);

3 one or more transceiver(s), coupled with the one or more dipole antenna(e), to

4 communicate with other devices; and

5 a hopping code engine coupled with the transceiver(s), the hopping code engine to select

6 a frequency hopping code (FHC) for communicating with other devices in a multi-band ultra-

7 wideband (MB-UWB) network, wherein the FHC defines a sequence of two or more pulses over

8 two or more frequencies.

1 8. The electronic appliance of claim 7, wherein the FHC defines a sequence of two or more

2 pulses over two or more frequencies comprises:

3 the FHC defines a sequence of two or more pulses over two or more frequencies from a

4 set of three or more frequencies.

1 9. The electronic appliance of claim 7, wherein the hopping code engine to select a

2 frequency hopping code (FHC) comprises:

3 the hopping code engine to select a frequency hopping code (FHC) from a set of

4 predetermined FHC's.

1       10.     The electronic appliance of claim 9, wherein the hopping code engine to select a  
2     frequency hopping code (FHC) from a set of predetermined FHC's for communicating with  
3     other devices in a multi-band ultra-wideband (MB-UWB) network comprises:

4                 the hopping code engine to select a frequency hopping code (FHC) from a set of  
5     predetermined FHC's for communicating with other devices in an Institute of Electrical and  
6     Electronics Engineers (IEEE) 802.15.3 network.

1       11.     The electronic appliance of claim 9, further comprising:

2                 the hopping code engine to encode a communication to transmit using the selected FHC.

1       12.     The electronic appliance of claim 9, further comprising:

2                 the hopping code engine to decode a communication received using the selected FHC.

1       13.     A storage medium comprising content which, when executed by an accessing machine,  
2     causes the accessing machine to select a frequency hopping code (FHC) for communicating with  
3     other devices in a multi-band ultra-wideband (MB-UWB) network, wherein the FHC defines a  
4     sequence of two or more pulses over two or more frequencies.

1       14.     The storage medium of claim 13, wherein the FHC defines a sequence of two or more  
2     pulses over two or more frequencies comprises the FHC defines a sequence of two or more  
3     pulses over two or more frequencies from a set of three or more frequencies.

1 15. The storage medium of claim 13, wherein the content to select a frequency hopping code  
2 (FHC) comprises content which, when executed by the accessing machine, causes the accessing  
3 machine to select a frequency hopping code (FHC) from a set of predetermined FHC's.

1 17. The storage medium of claim 15, further comprising content which, when executed by  
2 the accessing machine, causes the accessing machine to encode a communication to transmit  
3 using the selected FHC.

1 18. The storage medium of claim 15, further comprising content which, when executed by  
2 the accessing machine, causes the accessing machine to decode a communication received using  
3 the selected FHC.

1        19. An apparatus, comprising:

2              one or more dipole antenna(e);

3              one or more transceiver(s), coupled with the dipole antenna(e), to communicate with

4              other devices; and

5 control logic coupled with the transceiver(s), the control logic to select a frequency  
6 hopping code (FHC) for communicating with other devices in a multi-band ultra-wideband (MB-  
7 UWB) network, wherein the FHC defines a sequence of two or more pulses over two or more  
8 frequencies.

1 20. The apparatus of claim 19, wherein the FHC defines a sequence of two or more pulses  
2 over two or more frequencies comprises:

3 the FHC defines a sequence of two or more pulses over two or more frequencies from a  
4 set of three or more frequencies.

1 21. The apparatus of claim 19, wherein the control logic to select a frequency hopping code  
2 (FHC) comprises:

3 control logic to select a frequency hopping code (FHC) from a set of predetermined  
4 FHC's.

1 22. The apparatus of claim 21, wherein the control logic to select a frequency hopping code  
2 (FHC) from a set of predetermined FHC's for communicating with other devices in a multi-band  
3 ultra-wideband (MB-UWB) network comprises:

4 control logic to select a frequency hopping code (FHC) from a set of predetermined  
5 FHC's for communicating with other devices in an Institute of Electrical and Electronics  
6 Engineers (IEEE) 802.15.3 network.

1 23. The apparatus of claim 21, further comprising:

2 control logic to encode a communication to transmit using the selected FHC.

1 24. The apparatus of claim 21, further comprising:

2 control logic to decode a communication received using the selected FHC.